Abstract:

A system and method for iterative code optimization using adaptive or dynamic size metrics, for use with run-time software systems and virtual machines. The dynamic size metric may be calculated both for a set of predetermined factors (together with associated weights), and also for a set of variable factors determined during the runtime code introspection process. The predetermined factors, and their associated weights, may be varied to reflect the overall performance of the code in each optimization instance. In one embodiment a method is provided for performing adaptive optimization of application code within a virtual machine environment, the method comprising the steps of: gathering information about an application code and optimization parameters during run-time, passing said information via a feedback mechanism to an optimizer, calculating a dynamic size metric for the current application code using said optimization parameters, and optimizing the application code based on the dynamic size metric.